

Invasive Plants in Alberta

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Aquatic Systems

Land owners and occupiers are responsible for controlling noxious weeds and destroying prohibited noxious weeds under the *Alberta Weed Control Act*. Listed plants in the Act cause problems for the environment, health or economy. Know your responsibilities under the Act. Regardless of where plants are located, prevention is always the most effective approach in dealing with invasive plants.

What You Need to Know

What is the problem?

Land managers have a heightened awareness of invasive aquatic plants because the available methods of weed control are drastically reduced due to the associated sensitive ecosystems. Any vegetation modifications or pesticide application will need approval by federal or provincial government departments prior to any control efforts.

Under the *Water Act*, an approval is required for all aquatic vegetation removal. Under the *Public Lands Act*, disturbing the bed and shore of a water body without authorization is prohibited.

In lakes and rivers, invasive plants can interfere with recreational uses like swimming, boating and fishing. These plants can also affect industrial and municipal uses. Aquatic vegetation in irrigation canals can restrict water flow and clog trash racks and pump intakes.

Some plant species grown in water gardens and ponds or used in aquariums can be invasive if they escape into the wild. Improper disposal of this material can have a detrimental effect on Alberta's aquatic ecosystems.

Species to watch for

Purple loosestrife (*Lythrum salicaria*) is still found in wetlands across Alberta despite eradication efforts in the 1990's. No species relies on this plant for survival or habitat. As a prolific seed producer, the plant does well in aquatic situations if not destroyed.



Purple loosestrife (*Lythrum salicaria*)

Himalayan balsam (*Impatiens glandulifera*) appears often in urban settings in Alberta, and it has already escaped to riparian areas. The plant has the ability to out-compete native vegetation and will then die out in the winter, leaving banks open to soil erosion.

Flowering rush (*Butomus umbellatus*) is an invasive aquatic plant, previously sold as a pond plant. It is now found in lakes, rivers, streams and irrigation canals in Alberta. Elsewhere and in Montana, its spread has caused it to replace native vegetation, and it is affecting water supply systems and water usage.

Pale yellow iris (*Iris pseudacorus*) is an invasive aquatic plant previously sold as a pond plant. It is being found in wetlands and along shorelines in a few places in Alberta. All parts of this invasive aquatic plant are poisonous, and appropriate personal protective equipment (PPE's) is needed when handling them.

An invasive aquatic species present in neighbouring provinces and states is the Eurasian water milfoil (*Myriophyllum spicatum*). The identification of this new aquatic invasive species is complicated by the presence of a very similar native look-a-like in Alberta. Emphasis on prevention of the species is underway in Alberta.

All these aquatic plants are classified as prohibited noxious weeds under the Alberta *Weed Control Act* due to the aquatic areas they threaten. They should be destroyed whenever they are found.

What you can do

- Learn to identify regulated plants.
- Do not grow potentially invasive plants in ornamental plantings.
- Do not allow aquarium or water garden plants to enter Alberta water bodies, intentionally or accidentally.
- Clean, drain and dry boats, equipment and boat trailers before moving them from one water body to another or across provincial boundaries.

Learn More

Find out more on this topic and access these additional resources at the following web page:
www.agriculture.alberta.ca/invasive-weeds

Pesticide Use in or Near Water

Guidelines for Lakeshore Use

Aquatic Vegetation Removal from Alberta Lakes

Identification Guide to Alberta Aquatic Plants

Alberta Environmental Code of Practice for Pesticides



Himalayan balsam (*Impatiens glandulifera*)



Flowering rush (*Butomus umbellatus*)



Pale yellow iris (*Iris pseudacorus*)

There are very limited chemical control options for aquatic weeds in Alberta. A Special Use Approval is required for pesticide applications for aquatic weeds, except for specific situations outlined in the Alberta Environmental Code of Practice for Pesticides.

Be aware that many Alberta bodies of water are naturally nutrient rich and support a dense growth of native aquatic plants, which is important in the ecology of the water body. Refer to the Learn More section.



Photo credit: Idaho Department of Agriculture

Eurasian water milfoil (*Myriophyllum spicatum*)

Because water bodies fall under provincial and federal jurisdiction, consult with Alberta Environment and Sustainable Resource Development prior to herbicide use or vegetation removal.

All aquatic invasive plants should be reported to the following telephone number: 1-855-336-BOAT (2628).

General principles and resources

- Land owners and occupiers are responsible for controlling noxious weeds and destroying prohibited noxious weeds. Know your responsibilities under the Alberta *Weed Control Act*.
- Learn to identify invasive plants.
- Be alert for invasive plants and respond early when they are found.
- Reduce the introduction of invasive plants as well as the reproduction and movement of their seeds and plant parts.
- Reduce soil disturbance, which makes openings where invasive plants can establish.
- Use effective, appropriate methods to control invasive plants. Alberta Agriculture and Rural Development, Environment and Sustainable Resource Development and urban park departments can provide advice on control methods. Always follow label instructions when applying any herbicide.

Alberta Invasive Plant Identification Guide (from Wheatland County)

www.wheatlandcounty.ca/DocumentCenter/View/12

Alberta Invasive Species Council factsheets

www.abinvasives.ca

Alberta Weed Control Act and Regulations

www.agriculture.alberta.ca/weedcontrol-act

Alberta Weed Monitoring Network

www.agriculture.alberta.ca/weeds